1. **AMENDMENTS TO THE CLAIMS (LISTING OF CLAIMS):**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Canceled)

2. (Currently Amended) The ~~vector~~method of claim [[1]]44, wherein said AAV capsid protein [[is]]comprises a Vp1 or a Vp2 capsid protein.

3. (Currently Amended) The ~~vector~~method of claim [[1]]44, wherein said exogenous amino acid sequence binds to a mammalian low-density lipoprotein (LDL) or very low density lipoprotein (VLDL) receptor.

4. (Currently Amended) The ~~vector~~method of claim [[1]]44, wherein said exogenous amino acid sequence comprises the sequence of any one of SEQ ID NO:1 to ~~SEQ ID NO:21~~SEQ ID NO:10.

5. (Canceled)

6. (Currently Amended) The ~~vector~~method of claim [[1]]44, wherein said exogenous amino

acid sequence comprises the sequence of any one of SEQ ID NO:1 to ~~SEQ ID NO:20~~SEQ ID NO:10, and further comprises the sequence of SEQ ID NO:21.

7. (Currently Amended) The ~~vector~~method of claim [[1]]44, wherein said exogenous amino acid sequence comprises the sequence of ~~any one of SEQ ID NO:22 to SEQ ID NO:31~~ SEQ ID NO:9 or SEQ ID NO:10.

8. (Currently Amended) ~~A recombinant adeno-associated viral expression system comprising:~~

~~(a) a first polynucleotide comprising a first nucleic acid segment that encodes an AAV capsid protein that comprises an exogenous amino acid sequence that binds to a mammalian lipoprotein receptor; and~~

~~(b)~~ The method of claim 44, wherein said vector further comprises a second polynucleotide ~~comprising~~that comprises a second nucleic acid segment that encodes an expressed therapeutic agent.

9-15. (Canceled)

16. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 8, wherein said second polynucleotide further comprises a promoter operably linked to said second nucleic acid segment, wherein said promoter expresses said therapeutic agent in said mammalian cell.

17-18. (Canceled)

19. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 16, wherein said promoter comprises~~is~~ a mammalian or chicken β-actin promoter.

20. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 8, wherein said second polynucleotide further comprises an enhancer sequence operably linked to said second nucleic acid segment.

21. (Canceled)

22. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 20, wherein said enhancer sequence comprises a CMV enhancer.

23. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 8, wherein said second nucleic acid segment further comprises a post-transcriptional regulatory sequence.

24. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 23, wherein said regulatory sequence comprises a woodchuck hepatitis virus post-transcription regulatory element.

25.-27. (Canceled)

28. (Currently Amended) The method~~recombinant adeno-associated viral expression system~~ of claim 8, wherein said therapeutic agent is an α_1-antitrypsin (AAT) polypeptide.

29-43. (Canceled)

44. (Currently Amended) A method for targeting an AAV virion or viral particle to a mammalian cell that comprises a cell-surface lipoprotein receptor, said method comprising ~~the step of~~: providing to a population of cells an AAV ~~virion or viral particle that comprises~~ vector that comprises a first polynucleotide comprising a first nucleic acid segment that encodes an AAV capsid protein that comprises an exogenous amino acid sequence that binds to a mammalian lipoprotein receptor~~the vector of claim 1, or the recombinant adeno-associated viral expression system of claim 8~~, in an amount and for a time effective to target said virion or said viral particle to a cells ~~of~~in said population that expresses said cell-surface lipoprotein receptor.

45-51. (Canceled)

52. (New) The method of claim 4, wherein said exogenous amino acid sequence comprises the sequence of SEQ ID NO:1.

53. (New) The method of claim 52, wherein said exogenous amino acid sequence further comprises the sequence of SEQ ID NO:21.

54. (New) The method of claim 28, wherein said therapeutic agent comprises a human α_1-antitrypsin polypeptide.

55. (New) The method of claim 19, wherein said promoter comprises a chicken β-actin promoter.

56. (New) The method of claim 44, wherein said vector is comprised within an AAV virion or viral particle.

57. (New) A method for targeting an AAV virion or viral particle to a mammalian cell that comprises a cell-surface lipoprotein receptor, the method comprising: providing to a population of mammalian cells an AAV vector that comprises a first polynucleotide comprising a first nucleic acid segment encoding an AAV capsid protein that comprises an exogenous amino acid sequence that selectively binds to a mammalian lipoprotein receptor, in an amount and for a time effective to target the virion or viral particle to at least a first cell in the population that expresses the cell-surface lipoprotein receptor.

58. (New) A method for targeting an AAV virion or viral particle to a human host cell, the

method comprising: providing to the human host cell an AAV vector that comprises a nucleic acid segment that encodes an AAV capsid protein comprising an exogenous amino acid sequence that selectively binds to at least a first lipoprotein receptor on the surface of the human host cell, in an amount and for a time effective to allow the exogenous amino acid sequence to selectively bind to the at least a first cell-surface lipoprotein receptor, thereby targeting the AAV virion or viral particle to the human host cell.

59. (New) The method of claim 58, wherein the exogenous amino acid sequence comprises at least a first contiguous amino acid sequence from SEQ ID NO:9 or SEQ ID NO:10.

60. (New) The method of claim 59, wherein the exogenous amino acid sequence comprises (a) at least a first contiguous amino acid sequence from SEQ ID NO:9 or SEQ ID NO:10, and (b) at least a second contiguous amino acid sequence that comprises the amino acid sequence of SEQ ID NO:21.